

1. A method comprising:

storing partial quotients of a continued fraction in a
first set of counters;

initializing a second set of counters with counter
5 values;

decrementing a target counter in the second set of
counters to obtain a decremented counter value; and

outputting a value that corresponds to a partial quotient
in a first counter in the first set of counters, the value
10 being based on the decremented counter value.

2. The method of claim 1, further comprising:

determining the value based on the decremented counter
value.

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3. The method of claim 2, wherein determining the value
comprises:

determining if the decremented counter value is zero;

assigning the value to be equal to the partial quotient
20 in the first counter if the decremented counter value is not
zero; and

assigning the value to be equal to the partial quotient in the first counter plus one if the decremented counter value is zero.

5 4. The method of claim 3, wherein if the decremented counter value is zero, the method further comprises:

loading the target counter with a partial quotient from a counter in the first set of counters that corresponds to the target counter.

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5. The method of claim 4, wherein if the decremented counter value is zero, the method further comprises:

incrementing a value in a counter that precedes the target counter in the second set of counters.

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6. The method of claim 5, wherein the value is incremented in a counter that immediately precedes the target counter.

20 7. The method of claim 1, further comprising:

decrementing a counter value in a counter that follows the target counter in the second set of counters to obtain a second decremented counter value; and

outputting a value that corresponds to a partial quotient in a first counter, the value being based on the second decremented counter value from the second set of counters.

5 8. The method of claim 1, wherein the counters comprise software counters.

9. The method of claim 1, further comprising using the value to generate or to correct a clock signal.

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10. The method of claim 1, further comprising using the value in a computer graphics application.

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11. The method of claim 1, further comprising using the value to schedule network traffic.

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12. An article comprising a machine-readable medium that stores executable instructions that cause a machine to:

store partial quotients of a continued fraction in a first set of counters;

initialize a second set of counters with counter values;
decrement a target counter in the second set of counters to obtain a decremented counter value; and

output a value that corresponds to a partial quotient in a first counter in the first set of counters, the value being based on the decremented counter value.

5 13. The machine-readable medium of claim 11, further comprising instructions to:

 determine the value based on the decremented counter value.

10 14. The machine-readable medium of claim 13, wherein determining the value comprises:

 determining if the decremented counter value is zero;

 assigning the value to be equal to the partial quotient in the first counter if the decremented counter value is not

15 zero; and

 assigning the value to be equal to the partial quotient in the first counter plus one if the decremented counter value is zero.

20 15. The machine-readable medium of claim 14, wherein the machine-readable medium further comprises instructions to:

load the target counter with a partial quotient from a counter in the first set of counters that corresponds to the target counter if the decremented counter value is zero.

5 16. The machine-readable medium of claim 15, wherein the machine-readable medium further comprises instruction to:

increment a value in a counter that precedes the target counter in the second set of counters if the decremented counter value is zero.

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17. The machine-readable medium of claim 16, wherein the value is incremented in a counter that immediately precedes the target counter.

15 18. The machine-readable medium of claim 11, further comprising instructions to:

decrement a counter value in a counter that follows the target counter in the second set of counters to obtain a second decremented counter value; and

20 output a value that corresponds to a partial quotient in a first counter, the value being based on the second decremented counter value from the second set of counters.

19. The machine-readable medium of claim 11, wherein the counters comprise software counters.

20. The machine-readable medium of claim 11, further comprising instructions to use the value to generate or to correct a clock signal.

21. The machine-readable medium of claim 11, further comprising instructions to use the value in a computer graphics application.

22. The machine-readable medium of claim 11, further comprising instructions to use the value to schedule network traffic.

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23. An apparatus comprising:

a first set of counters to store partial quotients of a continued fraction;

a second set of counters to store counter values, the second set of counters corresponding to the first set of counters; and

circuitry to decrement a counter value in a target counter in the second set of counters to obtain a decremented

counter value, and to output a value that corresponds to a partial quotient in a first counter in the first set of counters, the value being based on the decremented counter value.

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24. The apparatus of claim 23, wherein the circuitry determines the value based on the decremented counter value.

25. The apparatus of claim 24, wherein determining the
10 value comprises:

determining if the target counter has a counter value of zero;

assigning the value to be equal to the partial quotient in the first counter if the target counter does not have a
15 counter value of zero; and

assigning the value to be equal to the partial quotient in the first counter plus one if the target counter has a counter value of zero.

20 26. The apparatus of claim 25, wherein if the target counter has a counter value of zero, the circuitry loads the target counter with a partial quotient from a counter in the first set of counters that corresponds to the target counter.

27. The apparatus of claim 26, wherein if the target
counter has a counter value of zero, the circuitry increments
a value in a counter that precedes the target counter in the
5 second set of counters.

28. A clock generating circuit comprising:
an oscillator to produce a clock signal; and
circuitry to:

10 generate partial quotients of a continued fraction
based on the clock signal;

store the partial quotients in a first set of
counters;

store counter values in a second set of counters;

15 decrement a counter value in a target counter in the
second set of counters to obtain a decremented counter
value; and

output a value that corresponds to a partial
quotient in a first counter in the first set of counters,
20 the value being based on the decremented counter value.

29. The clock generating circuit of claim 28, wherein
the circuitry comprises a processor and a memory.

30. The clock generating circuit of claim 28, wherein
the circuitry:

determines if the decremented counter value is zero;

5 assigns the value to be equal to the partial quotient in
the first counter if the decremented counter value is not
zero; and

 assigns the value to be equal to the partial quotient in
the first counter plus one if the decremented counter value is
10 zero.